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Relevance scale **1** [Web accessibility: Web accessibility for low bandwidth input](#)

Jennifer Mankoff, Anind Dey, Udit Batra, Melody Moore

July 2002 **Proceedings of the fifth international ACM conference on Assistive technologies**Full text available:  [pdf\(1.03 MB\)](#)Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

One of the first, most common, and most useful applications that today's computer users access is the World Wide Web (web). One population of users for whom the web is especially important is those with motor disabilities, because it may enable them to do things that they might not otherwise be able to do: shopping; getting an education; running a business. This is particularly important for low bandwidth users: users with such limited motor and speech that they can only produce one or two signs ...

Keywords: WWW, low bandwidth input, motor impairment, web proxy

2 [Accessibility of Internet websites through time](#)

Stephanie Hackett, Bambang Parmanto, Xiaoming Zeng

September 2004 **ACM SIGACCESS Accessibility and Computing , Proceedings of the ACM SIGACCESS conference on Computers and accessibility**, Issue 77-78Full text available:  [pdf\(914.16 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Using Internet Archive's Wayback Machine, a random sample of websites from 1997-2002 were retrospectively analyzed for effects that technology has on accessibility for persons with disabilities and compared to government websites. Analysis of Variance (ANOVA) and Tukey's HSD were used to determine differences among years. Random websites become progressively inaccessible through the years ($p < 0.0001$) [as shown by increasing Web Accessibility Barrier (WAB) scores], while complexity of the w ...

Keywords: internet archive, web accessibility, world wide web

3 [Interactive posters: universality: Case study: localization of an accessibility evaluation](#)

Michael Cooper, Piotr Rejmer

March 2001 **CHI '01 extended abstracts on Human factors in computing systems**Full text available:  [pdf\(190.69 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

During the localization process of Bobby [1], a Web tool analyzing accessibility, we have encountered technical and human issues due to major cultural and language differences affecting the user interface: • Bobby could not handle multiple byte encoding, • in order to understand differences and in the design of the GUI for a global audience we had to account for cultural issues such as uncertainty avoidance. Successful localization of this product has required attention to novel technical ...

Keywords: accessibility, automated evaluation, internationalization, localization, uncertainty avoidance

4 Bridging the gap: between accessibility and usability

Mary Frances Theofanos, Janice (Ginny) Redish

November 2003 **interactions**, Volume 10 Issue 6

Full text available: [!\[\]\(de95854c7ee024cfadc48187bbb781b2_img.jpg\) pdf\(963.51 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)
[!\[\]\(cef08d8c15d8a8acd5e25ab0d65432c3_img.jpg\) html\(48.56 KB\)](#)

Guidelines for Accessible---and Usable---Web Sites: Observing Users Who Work With Screenreaders

5 Accessibility designer: visualizing usability for the blind

Hironobu Takagi, Chieko Asakawa, Kentarou Fukuda, Junji Maeda

September 2004 **ACM SIGACCESS Accessibility and Computing , Proceedings of the ACM SIGACCESS conference on Computers and accessibility**, Issue 77-78

Full text available: [!\[\]\(9c2e8d1b5bd77cb5c9f83b7a9cff79fd_img.jpg\) pdf\(1.02 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

These days, accessibility-related regulations and guidelines have been accelerating the improvement of Web accessibility. One of the accelerating factors is the development and deployment of accessibility evaluation tools for authoring time and repair time. They mainly focus on creating compliant Web sites by analyzing the HTML syntax of pages, and report that pages are compliant when there are no syntactical errors. However, such compliant pages are often not truly usable by blind users. Thi ...

Keywords: accessibility, accessibility checker, blind, visually impaired, voice usability

6 Applying heuristics to perform a rigorous accessibility inspection in a commercial context

Claire Paddison, Paul Englefield

June 2002 **ACM SIGCAPH Computers and the Physically Handicapped , Proceedings of the 2003 conference on Universal usability**, Issue 73-74

Full text available: [!\[\]\(83bbbd261710c59db0214aa27b2edc0d_img.jpg\) pdf\(266.00 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Accessibility heuristics have been developed to compliment the accessibility guidelines. The use of Web accessibility heuristics in heuristic evaluations can ensure that a greater range of special needs will be considered, from visual to cognitive impairments. Key advantages of heuristics are conciseness, memorability, meaningfulness and insight. The heuristics can be used effectively to understand which areas of a site have accessibility issues and can provide useful insight into how to create a ...

Keywords: IBM heuristic evaluation database, accessibility, accessibility heuristics, heuristic evaluation

7 Accessible accessibility

David Sloan, Peter Gregor, Murray Rowan, Paul Booth

November 2000 Proceedings on the 2000 conference on Universal Usability

Full text available:  [pdf\(594.60 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper discusses the need for an all-encompassing methodology for determining the level of accessibility of web resources, and the requirement that the results of such a procedure are as meaningful as possible to developers. It is argued that current accessibility evaluation methods are unsatisfactory in the scope and presentation of their results. An alternative meta-method of accessibility assessment is then described.

Keywords: Web resource, accessibility, usability

8 A tool to evaluate universal Web accessibility 

Leonard R. Kasday

November 2000 Proceedings on the 2000 conference on Universal Usability

Full text available:  [pdf\(200.75 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The Web Accessibility Visual Evaluator (WAVE) is a tool that, in addition to performing automated checks, helps users perform the human judgments essential for evaluating if a web page is universally accessible to people with and without disabilities. For example, the WAVE (a) inserts the information accessed by people who are blind (e.g. alternative text, structural markup, reading order) into the representation seen by people who are sighted; (b) flags audio content requiring equivalents for ...

Keywords: World Wide Web, accessibility, blind, deaf, disabilities

9 Achieving web accessibility 

Brian Sierkowski

November 2002 Proceedings of the 30th annual ACM SIGUCCS conference on User services

Full text available:  [pdf\(203.24 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The World Wide Web has long outgrown its novelty to become a necessity in academics. Internet access has enabled numerous activities-registration, research, and distance learning, to name a few-to reach more people than ever. Federal laws require state schools to provide accessible web sites for persons with disabilities-yet many fail to, perhaps due to webmasters' ignorance and misconceptions that enabling access is expensive and time-consuming. Public schools violate this obligation when they ...

Keywords: ADA, accessibility, disabilities, web design, web development

10 Improving interaction: Scaffolding visually cluttered web pages to facilitate accessibility 

Alison Lee

May 2004 Proceedings of the working conference on Advanced visual interfaces

Full text available:  [pdf\(183.21 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Increasingly, rich and dynamic content and abundant links are making Web pages visually cluttered and widening the accessibility divide for the disabled and people with impairments. The adaptations approach of transforming Web pages has enabled users with diverse abilities to access a Web page. However, the challenge remains for these users to work with a Web page, particularly among people with minimal Web experience and cognitive

limitations. We propose that scaffolding can allow users to learn ...

Keywords: GUI button interface, Web, accessibility, design space, dynamic diversity, interaction design, page segmentation, recorder interface, scaffolding, speak text

11 Evaluating web resources for disability access

Murray Rowan, Peter Gregor, David Sloan, Paul Booth

November 2000 **Proceedings of the fourth international ACM conference on Assistive technologies**

Full text available:  [pdf\(195.50 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: accessibility, disability, evaluation, usability, web resources

12 Making chalk and talk accessible

S. Bennett, J. Hewitt, D. Kraithman, C. Britton

June 2002 **ACM SIGCAPH Computers and the Physically Handicapped , Proceedings of the 2003 conference on Universal usability**, Issue 73-74

Full text available:  [pdf\(252.21 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper investigates the development of an authoring package designed to mimic traditional "chalk and talk" delivery of content in education. It emphasizes the twin goals of making the output more accessible both for those with disabilities and for distance learners and also making the package usable by academic staff without requiring extensive training. It deals with issues arising from the capture of the material, the compromises and conflicts which are made in the satisfaction of accessibility ...

Keywords: SMIL, XML, accessibility, authoring system, speech recognition

13 Design: Proving the validity and accessibility of dynamic web-pages

R. G. Stone, J. Dhiensa

May 2004 **Proceedings of the international cross-disciplinary workshop on Web accessibility**

Full text available:  [pdf\(58.16 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

If a static web-page is checked for accessibility and passes then all is well. However checking the accessibility of the output from a dynamic (scripted) web-page is like testing a program to find errors. However many times a test succeeds it is always possible that the program will produce bad output next time. What is needed is something closer to a proof of correctness. This paper describes a first attempt to provide a proof of validity for dynamic web-pages which can be extended to a proof of ...

Keywords: accessibility, dynamic Web-pages, validity

14 Legal, social, theoretical and fundamental aspects: One content, three devices, the same need: access to information by people with special needs

Jorge Fernandes

May 2001 **Proceedings of the 2001 EC/NSF workshop on Universal accessibility of ubiquitous computing: providing for the elderly**

Full text available:  [pdf\(424.38 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In our days the PC, the TV and the telephone, mainly the mobile phones, will be the

privileged equipment to accede to the information. How the information can draw to serves the needs of each one of these equipment? It will be this possible? How to make compatible the necessities of each one, in a standard one that it serves at all? Will not have been always this the question when we spoke about citizens with special needs? Who is special? The citizens or the devices they use? How to obtain this ...

Keywords: DVB-T, MHP, PC, UMTS, access, design for all, digital video broadcast, disabled, elderly, guidelines, impairment, information, multimedia home platform, personal computer, total conversation, web

15 Accessibility: Tension, what tension?: Website accessibility and visual design

Helen Petrie, Fraser Hamilton, Neil King

May 2004 **Proceedings of the international cross-disciplinary workshop on Web accessibility**

Full text available: [!\[\]\(830769b31eeeaca920791081939ff8ba_img.jpg\) pdf\(494.83 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

There appears to be a widespread belief within the web design community -- and possibly amongst website commissioners - that accessible sites cannot be visually pleasing. We present the results of accessibility testing of 100 websites with 51 disabled users that should dispel this belief. While there are aspects of accessibility that do affect visual design, such as visual structure, colour contrast and text size, these are aspects of design that can affect all users, not only disabled users. Th ...

Keywords: accessibility, computers and society, information interfaces and presentation, screen design, social issues, user interfaces, visual design

16 A domain specific language framework for non-visual browsing of complex HTML structures

E. Pontelli, W. Xiong, G. Gupta, A. I. Karshmer

November 2000 **Proceedings of the fourth international ACM conference on Assistive technologies**

Full text available: [!\[\]\(0fb13ad0bfa3d86868cdd3883e5665b3_img.jpg\) pdf\(243.20 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: HTML, Web browsers, domain specific languages

17 Building a database driven/ADA compliant website

Joe Ziskovsky, Melissa Diers

November 2002 **Proceedings of the 30th annual ACM SIGUCCS conference on User services**

Full text available: [!\[\]\(4436e6b00b9d5e62c2a161129eb3e4d0_img.jpg\) pdf\(153.31 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The Learning Environment and Internet Service (LEIS) a unit of Information Technology Services has redesigned the departmental website to be ADA (Americans with Disabilities Act) compliant. This website is intended to be a model for web development projects at the University of Nebraska Medical Center (UNMC). The initiative was in response to a growing government and grant requirements for ADA compliance. In the past creating an ADA compliant website often involved developing and managing two sep ...

Keywords: accessibility, americans with disabilities act, database, site management, website

18 Web accessibility and section 508 compliance

Emily Gibson

May 2002 **Journal of Computing Sciences in Colleges**, Volume 17 Issue 6Full text available:  [pdf\(14.99 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

With the recent addition of Section 508 to the Rehabilitation Act of 1973 (enacted August 1998, implemented June 2001), the need for accessible and Section 508 compliant Web sites has become imperative. Web Accessibility Evaluation and Repair Tools have been created to help Web developers make Web pages accessible, mitigating the enormity of this task. The focus of the project was to compare and contrast a number of software tools available that test and/or fix Web sites and individual Web pages ...

19 Conditional narrowing without conditions

Sergio Antoy, Bernd Brassel, Michael Hanus

August 2003 **Proceedings of the 5th ACM SIGPLAN international conference on Principles and practice of declarative programming**Full text available:  [pdf\(279.27 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#), [review](#)

We present a new evaluation strategy for functional logic programs described by weakly orthogonal conditional term rewriting systems. Our notion of weakly orthogonal conditional rewrite system extends a notion of Bergstra and Klop and covers a large part of programs defined by conditional equations. Our strategy combines the flexibility of logic programming (computation of solutions for logic variables) with efficient evaluation methods from functional programming. In particular, it is the first ...

Keywords: conditional rewriting, evaluation strategies, functional logic programming, narrowing

20 Establishing standards for usable and accessible user services web sites

Dorothy Ann Amsler

September 2003 **Proceedings of the 31st annual ACM SIGUCCS conference on User services**Full text available:  [pdf\(138.89 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The University of Delaware provides nearly all of its information on the World Wide Web; in fact, much of it can be found only on the Web. With this focus, it is critical that all people be able to access the information they seek through usable and accessible Web sites. Responding to this need, User Services has developed a process for designing its new and revised Web pages with the philosophy that: 1. Web pages should allow all people to find the information they seek (usability). 2. Web pages ...

Keywords: accessibility, usability, web design guidelines, web standards

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[Sensor Based Motion Planning: The Hierarchical Generalized.. - Choset \(1996\)](#) (Correct) (40 citations)

I am thankful to Dr. Eric Paljug, Bill Williamson, **Bobby** Johnson, Tim Doyle, Dr. Anthony D'Amico, Jodi
: 39 2.3.5 Accessibility :

:100 4.2 Incremental Accessibility :

voronoi.sbp.ri.cmu.edu/~choset/papers/howiethesis.ps.gz

[Can I Find What I'm Looking For? - Patrizia Andronico Via \(2004\)](#) (Correct)

[4] by using automatic tools (validators)**Bobby** ([bobby.cast.org](#)) and Torquemada

using automatic tools (validators)**Bobby** ([bobby.cast.org](#)) and Torquemada

Keywords: Search engine, user interface, **accessibility**, usability. 1. INTRODUCTION The enormous
[www.www2004.org/proceedings/docs/2p430.pdf](#)

[KWARESMI -- Knowledge-based Web Automated Evaluation Tool - With Reconfigurable.. \(2003\)](#) (Correct)

A-Prompt (A-Prompt, 1999)LIFT (LIFT, 2003)**Bobby** (Cooper, 1999) and WebSat (Scholtz & Laskowski,

In addition, there is a lack of usability and **accessibility** experts due to an increased demand .A

Evaluation Tools Are The W3c Web Content **Accessibility** Guidelines ([www.w3c.org/tr/wc Ag10](#))

[www.isys.ucl.ac.be/bchi/publications/2003/Beirekdar-UAHCI2003.pdf](#)

[Accessibility and Usability Survey on UK and International.. - Micheloni, Bowen \(2002\)](#) (Correct)

2 Contents 1 **Accessibility** Survey using the **Bobby**

3 1.1 The **Bobby**

Accessibility and Usability Survey on UK and International

[www.museophile.sbu.ac.uk/access/mcn2002/survey.pdf](#)

[Localization Issues in Automated Usability Engineering - Piotr Rejmer Jean \(2003\)](#) (Correct)

and to promote **accessibility**, CAST created **Bobby** to help identify **accessibility** violations on

(Perlman, 2000)2 Example of interest **Bobby** is available as a feature of CAST's web site and

products exist that automatically evaluates the **accessibility** of a Web site according to the guidelines,

[www.isys.ucl.ac.be/bchi/publications/2003/Rejmer-HCI2003.pdf](#)

Unknown - (Correct)

are over 30 automated tools, such as WatchFire **Bobby** (2002)UsableNet LIFT (2002) and the W3C HTML

use two of three automated evaluation tools (**Bobby** WatchFire 2002 WAVE Pennsylvania's Initiative

available. However, Website usability and **accessibility** are still a problem. Numerous, automated,

[www.stanford.edu/group/siqss/itandsociety/./v01i03/v01i03a11.pdf](#)

[Disabled Access for Museum Websites - Bowen \(2003\)](#) (Correct)

To Reach Out To The Blind. 3. Survey Results The **Bobby** Validator [[bobby.watchfire.com](#)]Which Can Check

The Blind. 3. Survey Results The **Bobby** Validator [[bobby.watchfire.com](#)]Which Can Check For Wai

specialist browsers or against the relevant **accessibility** and validation standards. We consider the

[www.jpbowen.com/pub/www2003.pdf](#)

[Copyright 2002, Intel Corporation, All rights reserved. - Jennifer Mankoff Anind](#) (Correct)

by past work influence our own. For example, the **Bobby** system looks at the order in which text is read

than the browser. Figure 2 shows some of the **Bobby** web pages [3]**Bobby** is a program that checks web

Intel Corporation, All rights reserved. Web **Accessibility** for Low Bandwidth Input Jennifer Mankoff,

[www.intel-research.net/Publications/Berkeley/120520021007_105.pdf](#)

[The impact of Internationalization on - Guidel In Es \(2003\)](#) (Correct)

for **accessibility** evaluation of web pages, like **Bobby** (Cooper & Rejmer, 2001)attempt to assess web

in another context of use. In particular, **accessibility** guidelines are aimed at improving user

However, such guidelines pose a series of **accessibility** challenges themselves when a need arises to

www.isys.ucl.ac.be/bchi/publications/2003/Vanderdonckt-HCII2003.pdf

Web Access to Cultural Heritage for the Disabled - Bowen (2003) (Correct)

much improved as a result. However a check with the **Bobby accessibility** checker (see later) revealed three includes a "Text Only" link and is approved by the **Bobby** tool that checks for website **accessibility** (see for the blind or against the relevant **accessibility** and validation standards. We consider the www.jpbowen.com/pub/eva2003.pdf

Web Accessibility for Low Bandwidth Input - Jennifer Mankoff (Correct)

by past work influence our own. For example, the **Bobby** system looks at the order in which text is read than the browser. Figure 2 shows some of the **Bobby** web pages [3]**Bobby** is a program that checks web **Web Accessibility for Low Bandwidth Input Jennifer Mankoff** www.cs.berkeley.edu/projects/jmankoff/publications/assets02.pdf

How do Users Perceive Applying - Web Design Guidelines (2000) (Correct)

site design and evaluation process. For instance, **Bobby** [4] automatically checks a submitted web page for of CHI'96. ACM Press, New York (1996) 277-278 4. **Bobby** Version 2.0, HTML Web analyzer. Center for automatically checks a submitted web page for **accessibility** guidelines, compatibility guidelines, and for www.isys.ucl.ac.be/bchi/publications/2000/Limbourg-TFWWG2000.pdf

Case Study: Localization of an Accessibility Evaluation - Cooper, Rejmer (2001) (Correct)

ABSTRACT During the localization process of **Bobby** [1]a Web tool analyzing **accessibility**, we have differences affecting the user interface: **Bobby** could not handle multiple byte encoding, in Case study: localization of an **accessibility** evaluation Michael Cooper Center for www.isys.ucl.ac.be/bchi/publications/2001/Cooper-CHI2001.pdf

Lessons Learned From Internationalizing - Web Site Accessibility (2001) (Correct)

Peabody, MA 01960 USA, mcooper@cast.org Abstract **Bobby** is a software product that automatically the mainstream. One of the main products of CAST is **Bobby**, a software tool that analyzes Web pages for Learned From Internationalizing a Web Site **Accessibility** Evaluator Piotr Rejmer, 1 Michael Cooper, www.isys.ucl.ac.be/bchi/publications/2001/Rejmer-IWIPS2001.pdf

KWARESMI - Knowledge-based Web Automated.. - Beirekdar.. (2002) (Correct)

include: A-Prompt [1]WebSat [15]LIFT [5]and **Bobby** [6,7]Most of these tools share the same at evaluation time. For example, the new version of **Bobby** offers the single possibility of choosing which and reporting ergonomic violation (usability, **accessibility**, etc) and in some cases making suggestions www.isys.ucl.ac.be/bchi/publications/2002/Beirekdar-DSVIS2002.pdf

Usability and Accessibility Comparison of Governmental, - Organizational Educational.. (Correct)

were compared using two automatic evaluation tools: **Bobby** and LIFT. The governmental web site group has the

YourPage32?OpenForm) Bobby (www.cast.org/bobby) W3C WAI Content

Usability and **Accessibility** Comparison of Governmental, Organizational, agrino.org/pzaphiri/Papers/webnet_accessibility.pdf

A Framework And A Language For Usability Automatic .. - Beirekdar.. (2002) (Correct)

and web experts, and many evaluation tools like **Bobby** [2]A-Prompt [1]WebSat [17]and 508 accessible at aprompt.snow.utoronto.ca/2 **Bobby** Version 2.0, HTML Web analyser, Center for **Bobby** [2]A-Prompt [1]WebSat [17]and 508 **Accessibility** Suite [19] that were developed to enable www.isys.ucl.ac.be/bchi/publications/2002/Beirekdar-CADUI2002.pdf

A Study of Automated Web Site Evaluation Tools - Melody Ivory The (2002) (Correct)

are over 30 automated tools, such as WatchFire **Bobby**, 1 UsableNet LIFT, 2 and the W3C HTML Jennings [3] discuss some of the limitations of the **Bobby** tool (e.g.the lack of guidance on the structure 8, 2002 Abstract Web site usability and **accessibility** continues to be a pressing problem. Hence, ftp.cs.washington.edu/tr/2002/10/UW-CSE-02-10-01.pdf

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